

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of preparing gypsum wallboard comprising the steps of;
 - a) combining calcium sulfate hemihydrate (stucco) with water to form an aqueous slurry,
 - b) adding uncalcined synthetic gypsum particles that are calcium sulfate dihydrate particles of desulphogypsum (DSG) to said slurry, wherein the calcium sulfate dihydrate DSG particles are present within the range of about 10% to 30% w:w of the calcium sulfate hemihydrate, and
 - c) discharging the slurry onto a support so as to form a sheet of gypsum wallboard by setting of the slurry, wherein said calcium sulfate dihydrate DSG particles have a specific surface area within a range of from 0.1 and below 0.3 m²/g and have a particle size distribution within the range of 0.1 to 1000 microns, and whereby the calcium sulfate dihydrate DSG particles comprise an inert particulate filler and thereby improve acoustic properties of the wallboard.
2. (previously presented) A method of preparing gypsum wallboard as claimed in claim 1 wherein said calcium sulfate dihydrate DSG particles have a specific surface area within a range of 0.1 to 0.299m²/g.

3. (previously presented) A method of preparing gypsum wallboard as claimed in claim 1 wherein said calcium sulfate dihydrate DSG particles have a specific surface area within a range of 0.1 to $0.2\text{m}^2/\text{g}$.

4. (previously presented) A method of preparing gypsum wallboard as claimed in claim 1 wherein the calcium sulfate dihydrate is dried before being added to said slurry.

5. (previously presented) A method of preparing gypsum wallboard as claimed in claim 1 wherein the calcium sulfate dihydrate is mixed with water and added to the stucco and water mixture as a slurry.

6. (cancelled)

7. (previously presented) A method of preparing gypsum wallboard as claimed in claim 1 wherein the calcium sulfate dihydrate DSG particles are present within the range of about 10 to 25% w:w of the calcium sulfate hemihydrate.

8. (cancelled)

9. (previously presented) A method of preparing gypsum wallboard as claimed in claim 1 wherein the calcium sulfate dihydrate DSG particles are present in the composition in an amount of about 20% by w:w of the calcium sulfate hemihydrate.

10. (cancelled)

11. (cancelled)

12. (previously presented) A method according to claim 1 wherein existing gypsum wallboard is crushed to a suitable size and added to the slurry to provide additional bulk to the wallboard mixture, thereby improving the acoustic properties of the wallboard.

13. (previously presented) A cementitious composition for gypsum wallboard, the composition comprising a mixture of calcium sulfate hemihydrate (stucco), water and uncalcined synthetic gypsum particles that are calcium sulfate dihydrate particles of desulphogypsum (DSG) particles, said mixture having been set into gypsum wallboard, the calcium sulfate dihydrate DSG particles being present in the composition in an amount of about 10% to 30% w:w of the stucco, wherein the calcium sulfate dihydrate DSG particles have a specific surface area within a range of from 0.1 and below 0.3 m²/g and have a particle size distribution within the range of 0.1 to 1000 microns, whereby the calcium sulfate dihydrate DSG particles comprise an inert particulate filler and thereby improve acoustic properties of the wallboard.

14. (cancelled)

15. (cancelled)

16. (previously presented) A cementitious composition according to claim 13 wherein the DSG particles are present in the

composition within the range of about 10% to 25% w:w of the stucco.

17. (previously presented) A cementitious composition according to claim 13 wherein the DSG particles are present in the composition within the range of about 10-20% w:w of the stucco.

18. (previously presented) A cementitious composition according to claim 13 wherein the DSG particles are present in the composition in an amount of about 20% w:w of the stucco.

19. (previously presented) A cementitious composition according to any one of claims 13, 16, 17 or 18 further comprising existing wallboard crushed or milled and added to the slurry to provide additional bulk to the wallboard mixture, thereby improving the acoustic properties of the wallboard.

20. (cancelled)

21. (original) A cementitious wallboard produced by the method of claim 1.

22. (previously presented) A cementitious wallboard containing the cementitious composition of claim 13.

23. (previously presented) A method of preparing gypsum wallboard as claimed in claim 1 wherein the calcium sulfate dihydrate DSG particles are present within the range of about 10% to 20% w:w of the calcium sulfate hemihydrate.